

Effect of Working Environment on Job Satisfaction of Employees in Nepal Electricity Authority

Deepak Basnet¹

Abstract

Organization are facing several challenges due to the dynamic nature of the environment in this modern era. The major challenge for a business is to satisfy its employees in order to cope up with the ever changing and evolving environment and to achieve success and remain in competition. The business must satisfy the needs of its employee to increase the efficiency, effectiveness, productivity and job commitment by providing good working conditions. The aim of this research is to examine the effect of working environment on employee job satisfaction. This research employed a quantitative methodology. The required data were collected through a self-administered survey questionnaire. The target population are the employees of Nepal Electricity Authority and only 108 employees were taken as sample using convenience sampling method. The result indicates that there is positive relationship between working environment and job satisfaction. The study also concludes that with some brief prospects that the businesses need to realize the importance of good working environment for maximizing the level of job satisfaction. This research may benefit to society by encouraging people to contribute more to their jobs and may help them in their personal growth and development. Hence, it is essential for an organization to motivate their employees tow work hard for achieving the organizational objectives and goals.

Keywords: *job satisfaction, quality of work life, incentive, safety and security*

1. Introduction

The working environment plays an important role for the employee performance. It has great impact on employee performance either towards negative or the positive outcomes (Chandrasekar, 2011). There are international organizations who debate the rights of employees. About fifty percent of the time is spent

¹ Faculty, Shanker Dev Campus

within indoor environments of the people which has great effect in their mental status, actions, abilities and performance (Dorgan, 1994). Increased productivity and better outcomes is assumed to be the result of better workplace environment. Better physical environment of work place will boost the employees and ultimately improve their productivity. Various literature pertain to the study of multiple offices as well as office building indicated that the factors such as dissatisfaction, cluttered workplaces and the physical environment are playing a main role in the loss of employees' productivity (Carnevale, 1992).

Generally, job satisfaction is a sense of comfort and positive experience that an employee has related to his job. Job satisfaction can affect work behavior, and through that, the organizational performance. For a long time, job satisfaction has been viewed as a unique concept, but today it is seen as a very complex part of attitude towards different aspects of the work (Rollinson et al., 1998). Therefore, the definition of job satisfaction should include a variety of factors such as nature of work, salary, stress, working conditions, colleagues, superiors, working hours etc. Working conditions as a factor of job satisfaction include: the influence of factors related to the employee, so called subjective factors; the impact of environmental factors; and the impact of organizational factors that are primarily related to the organization of production.

The studies which dealt with the working conditions as a major factor of job satisfaction shows that employees prefer working conditions which are not dangerous and unpleasant (Robbins, 1998). They like working conditions which are similar to the conditions that they have in their homes. Furthermore, researches have shown a link between working conditions and job satisfaction (Brill et al., 2001; Newsham et al., 2004; Finnegan and Solomon, 1981; Leather, et al., 1998, Veitch et al., 2005; Newsham et al., 2009; Kinzl et al., 2005). The aim of this paper is to elucidate the impact of working conditions to the job satisfaction by analyzing and comparing two categories of employees, the employees who work in the normal (pleasant) working conditions and the employees who work in difficult working conditions. Therefore, this paper will attempt to answer the following research questions: (1) whether there are differences in overall job satisfaction between employees who work in difficult working conditions, and those who work in normal working conditions, (2) do the working conditions represent the important factor of overall job satisfaction of the employees who work in difficult working conditions, (3) whether there is a difference in the satisfaction with working conditions between these two categories of employees.

2. Objective

This study aims to investigate how the relationship between working environment and job satisfaction exists in Nepal Electricity Authority.

3. Conceptual foundation

Frederick Herzberg who was the first behavioural scientist to look at motivating employees from different angles has developed two-factor theory for work motivation. The theory was based on the contents of interviews conducted on 200 engineers and accountants. Herzberg and his associates asked participants to describe their job experience that produced good and bad feelings about their jobs while carrying their research. The research found that there are two sets of needs or factors viz. hygiene factors and motivating factors (Hergberg, Mausne & Snyderman, 1959). Similarly, another researcher by Alderfers (1969) reformulated Maslow's need of hierarchy into three basic human needs simplifying it to make it more in tune with data obtained from empirical research. He kept Maslow's hierarchical structure but reduced the levels to three on the basis that a certain overlap existed in the middle layers and call them existence, relatedness and growth which is ERG theory. Where, existence is the lowest level need which is concerned with physical survival and includes the obvious needs for food, water and shelter which can be satisfied through salary, fringe benefits, safe working environment and some measures of job security. Relatedness needs to involve interaction with other people and the satisfaction they can bring in the form of emotional support, respect, recognition and sense of belonging. These needs can be satisfied on the job through co-workers and off the job through friends and family. Growth needs focuses on the self and includes need for personal growth and development which can be satisfied only by using one's capabilities to the fullest.

A research by Akinwale and George (2020) investigated the predictors of work environment job satisfaction among nurses in both federal and state tertiary hospitals in Lagos state. The research used the longitudinal research design to elicit information form the respondents. Simple random sampling technique was used to administer the research instrument to select 364 nurses from hospitals. Hierarchical multiple regression was sued to analyze the data obtained. The study found out that all the variables collectively determined nurses job satisfaction. However, the salary was the most fundamental essential predictor that drive nurses' job satisfaction followed by advancement and promotion. The research concluded that to retain

and prevent turnover intention among nurses, and other health care workers, the management of hospitals must pay due attention to issue relating to job satisfaction, as this is likely to increase health care system effectiveness, boost mental and social health of the nurses.

Raziq and Maula-Bakhsh (2022) depicted that in the modern era, organizations are facing several challenges due to the dynamic nature of the environment. The main objective of the study was to examine the effect of working environment on employee job satisfaction. The research employed a quantitative methodology. The required data were collected through a self-administered survey questionnaire. Simple random sampling method was used for collection of data from 210 employees in Quetta city of Pakistan. The results indicate that there is positive relationship between working environment and employee jobs satisfaction. The study concluded with some brief prospects that the businesses need to realize the importance of good working environment for maximizing the level of job satisfaction.

Tansel investigated the relationship between working environment, firm size and workers' job satisfaction. The research used a unique data of 28240 British employees, work place employee relations survey. In this data set, the employees' questionnaire is matched with the employees' questionnaire. Four measures of job satisfaction were considered with job satisfaction that are influence over job, satisfaction with amount of pay, satisfaction with sense of achievement and satisfaction with respect from supervisors. The result shows that they all are negatively related to the firm size implying lower level of job satisfaction in larger firms. Similarly, the firm size in return is negatively related to the degree of flexibility in the working environment of employees.

From the review of literature, it can be understood that, although, many studies have been conducted on different aspects of employee's relations; a study specifically for working conditions and job satisfaction of employees of NEA in Nepal is missing in literature. Moreover, till the date, no research has been conducted on any aspect of working conditions and job satisfaction of employees of NEA. Hence, the study examined empirically the vital issues relating to the working conditions and job satisfaction of employees in selected units of Nepal Electricity Authority in Kathmandu and suggests measures to make them more effective contributions for the efficiency and success of NEA. Previous research has taken intrinsic factors to measure employee satisfaction where as some of the research has done by considering extrinsic factors. This research has taken different five aspects such

as relationship and communication, QWL, appreciation, incentive and safety and security all together to determine the impact of work environment on job satisfaction which previous research has not included. This research has focuses on extrinsic as well as intrinsic factors to determine the level of employee job satisfaction in Nepal Electricity Authority.

4. Research Methodology

4.1 Research design

Descriptive survey design was used in this study. This study systematically gathers the information from respondents for the purpose of examining the impact five independent variable i.e. relationship and communication system, quality of work life, appreciation, incentive structure, and safety and security measures on the dependent variable i.e. employees job satisfaction in Nepal Electricity Authority. This study used qualitative data collected through the questionnaire representing both dependent and independent variable on five point Likert scale varying from 1 (highly satisfied) to 5 (dissatisfied). On the basis of the questionnaire, data were collected and collected responses were analyzed using statistical software.

4.2 Sampling design

Two units of NEA Kuleshwor Unit and Ratnapark Unit are selected as sample to make it more representative. According to record, there are currently 245 employees working in Ratnapark and Kuleshwor unit. Only 120 questionnaires were supplied to the sample units to obtain sample statistics to come up with the conclusion of this study. Out of the questionnaire supplied, 108 responses were received and analyzed to come up with the intended objectives of the study. Judgmental sampling was used to select the NEA as a sampling frame. Convenience sampling was used to select individual respondent.

4.3 Sources of data

The questionnaire was consisted 34 questions to measure dependent and independent variables. The major purpose of the questionnaire was to examine the condition of work environment and its impact on job satisfaction of employees in Nepal Electricity Authority. All questions were close end. All the questions are measured using 5-point scales anchored by 1 to 5 to create an easy to answer and unbiased questionnaire. In this study a five point Likert scale.

4.4 Tools of data analysis

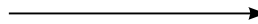
Particularly, the descriptive study part used graphs, tables, mean, standard deviation and percentage distribution for presentation and analysis. And, the hypothesis testing part included tables, mean, standard deviation, Pearson's correlations and linear regression.

4.5 Research framework

A research framework has been used to help focus on the variables in the study.

Independent variable

- Relation & communication system
- Quality of work life
- Appreciation
- Incentive system
- Safety and security



Dependent variables

Job Satisfaction

Job satisfaction is a function of independent variables such as relationship and communication system, quality of work life, appreciation, incentive system and so on.

5. Results and Analysis

5.1 Correlation Analysis

The correlation refers to the relationship between two or more than two variables. Karl Pearson's correlation analysis was carried out for variables having simple multi-option answer. A positive correlation shows the direction of the relationship is positive with one increasing in reaction to the other's increase. Meanwhile, a negative correlation coefficient reveals the reverse of the above; and increase in one when the other decreases.

The correlation between job satisfaction and other variables has been calculated in order to find out the mutual relationship. Correlation between communication, quality of work life, appreciation, incentive and safety and security aspect of work environment has been calculated so that one variable effect on another variable can be determined. Correlation between independent variables have been presented in the table 1.

Table 1*Correlation analysis (N = 108 in all cases)*

Variables	Corrleation	Satisfactions
Relationship	Person correlation (Sig. (2-tailed))	.537** .000
QWL	Person correlation Sig. (2-tailed) N	.445** .000 108
Appreciation	Person correlation Sig. (2-tailed) N	.462** .000 108
Incentive	Person correlation Sig. (2-tailed) N	.362** .000 108
Safety	Person correlation Sig. (2-tailed) N	.444* .000 108

Source: SPSS

**. Correlation is significant at the 0.01 level (2-tailed).

Relationship between job satisfaction and communication system in NEA

Table 1 revealed that the correlation coefficient between job satisfaction and communication of NEA is 0.537. Which implies that the two variables are more positively correlated. The positive coefficient of correlation is 0.537 at 1% significant level.

Relationship between job satisfaction and quality of work life in NEA

Table 1 revealed that the correlation coefficient between job satisfaction and quality of work life of NEA is 0.445 which implies that the two variables are not highly positively correlated. The positive coefficient of correlation is 0.445 at 1% level of significant.

Relationship between job satisfaction and appreciation in NEA

Table 1 depicted that the correlation coefficient between job satisfaction and appreciation of NEA is 0.462 which implies that the two variables are not strongly

positively correlated. The positive coefficient of correlation is 0.462 at 1% level of significance.

Relationship between job satisfaction and incentive system in NEA

Table 1 revealed that correlation coefficient between job satisfaction and incentive system of NEA is 0.362 which implies that the two variables are less positively correlated. The positive correlation coefficient is 0.362 at 1% level of significance.

Relationship between job satisfaction and safety and security in NEA

Table 1 shows that correlation coefficient between job satisfaction and safety and security in NEA is 0.444 which implies that the variables have moderate positive correlation. The positive correlation coefficient 0.444 at 1% level of significance.

From the table, it is observed that work environment i.e. (1) relation and communication (2) quality of work life (3) appreciation (4) incentives (5) safety and security are positively correlated with the job satisfaction of employees in NEA. It means that employees' job satisfaction in NEA are affected by relationship and communication system, quality of work life, appreciation, incentives and safety & security.

Table 2 : Summary of correlation and hypothesis testing

Hypothesized relationship	Estimate		Conclusion
	R	P	
H1: C → Relationship	0.537	0.01	Accepted
H2: C → Quality of work life	0.445	0.01	Accepted
H3: C → Appreciation	0.462	0.01	Accepted
H4: C → Incentives	0.362	0.01	Accepted
H5: C → Safety	0.444	0.01	Accepted

From the table 2, it can be concluded that the independent variables relationship, QWL, appreciation, incentive and safety of work environment have significant positive relationship with employee job satisfaction. However, the relationship and communication aspect of work environment has higher correlation coefficient i.e. 0.537. Hence, it can be concluded that this dimension of work environment has a good impact on job satisfaction.

5.2 Regression Analysis

Regression analysis is a statistical process for estimating the relationship among variables. Regression analysis includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variables and independent variables. Regression analysis is a mathematical measurement of average relationship between two variables or more variables in terms of original unit of data. The main purpose of multiple regression is to learn more about the relationship between several independent or predictor variables and dependent variables or criterion variables. In this study, the dependent variable is job satisfaction and independent variable are relationship and communication, QWL, appreciation, incentive and safety and security.

The line of regression: $y = a + bx$

Multiple Regression Model

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i.$$

Where,

Y = Job satisfaction (dependent variable)

X1 = Relationship and communication, X2 = QWL, X3 = Appreciation, X4 = Incentive, X5 = Safety and security.

α = Constant,

β_i = Coefficient of slope of regression model

e_i = Error term

where, A is constant and B is regression coefficient. A measure of change Y per unit change in X. If 1 unit increases in relationship and communication system, the job satisfaction will also increase. This is presented in the table 4.15.

The table below indicates the findings of regression analysis between five independent variables and job satisfaction.

Table 3 : Regression Analysis – Model Summary

Model	R	R-square	Adjusted R-square	Std. error of the estimate
1	.717 ^a	.514	.490	.30127

a Predictors: (Constant), safety, appreciation, relationship, incentive, QWL

Source: SPSS

Regression model summary indicates that R-square also known as coefficient of determination which can help in explaining variance. The value of R-square value as evident from table 3 is 0.514 which means 51.4 percent variation in job satisfaction is explained by working environment consisting of relationship and communication, QWL, appreciation, incentive and safety & security in NEA. However, the remaining 48.6% is still unexplained in this research. In other words, there are other additional variables that are important in explaining satisfaction of employees in Nepal Electricity Authority that have not been considered in this research.

Similarly, adjusted R-square is 0.49 which means 49% variation in job satisfaction is explained by relationship and communication, QWL, appreciation, incentive and safety and security of working environment in Nepal Electricity Authority after adjusting degree of freedom (df). This shows average relationship between all independent variables and dependent variable. Model summary also indicates the standard error of the estimate of 0.30127 which shows the variability of the observed value of factors influencing job satisfaction of employees in Nepal Electricity Authority from regression line is 0.30127 units.

Table 4 : ANOVA Test

Model	Sum of squares	DF	Mean square	F	Sig.
1. Regression	9.779	5	1.956	21.547	.000 ^b
Residual	9.258	102	.091		
Total	19.036	107			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Safety, Appreciation, Relationship, Incentive, QWL

Source: SPSS

Based on ANOVA result, the p-value is 0.000 which is lesser than alpha value. Therefore, the model seemed a good predictor of a relationship between the dependent and independent variables. As a result, the independent variables have relationship and communication, QWL, appreciation, incentives, safety & security aspects of working conditions in NEA are significant in explaining the variable in employees' job satisfaction.

Table 5 : Coefficients

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.
	B	Std. Error	Beta		
1 (constant)	.532	.188		2.825	.006
Relationship	.220	.048	.361	4.625	.000
Quality of work life	.112	.064	.145	1.751	.083
Appreciation	.120	.046	.214	2.610	.010
Incentives	.061	.044	.111	1.378	.171
Safety & security	.163	.054	.262	2.999	.003

a Dependent variable: Satisfaction

Source: SPSS

Taking five dimension of working environment including relationship and communication, QWL, appreciation, incentive, safety and security as independent variables (X1, X2, X3, X4 and X5) and job satisfaction as dependent variable, the model is constructed with equation as below:

$$\hat{Y} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$$

Based on the coefficients, the regression equation for the job satisfaction can be written as:

$$\hat{Y} = 0.532 + 0.220X_1 + 0.112X_2 + 0.12X_3 + 0.061X_4 + 0.163X_5$$

Regression coefficient of relationship and communication, QWL, appreciation, incentive and safety and security are 0.22, 0.112, 0.12, 0.061 and 0.163 respectively in job satisfaction.

The table 5 also shows that all independent variables such as relationship and communication, QWL, appreciation, incentive and safety and security of Nepal Electricity Authority have significant result since their respective p-values are less than level of significant ($P < 0.01$).

6. Discussion

In this research, there is positive relationship between working environment and job satisfaction in NEA. The employees working both unit have agreed that working environment plays a vital role in attaining job satisfaction. Like this result, Chandrasekar (2011) argued that an organization needs to pay attention to

create a work environment that enhance the ability of employees to become more productive in order to increase profitability for the organization. As the competition has increased and business environment is dynamic and challenging, so different organizations in order to operate up to their maximum potential, have to ensure that their employees are working in a conducive and friendly environment. Employees are becoming concerned about the working environment which includes working hours, job safety and security, relation with co-worker, esteem needs and top management as mentioned in this study.

The value of R-square is 0.514 that means 51.4 percent variation in job satisfaction is explained by working environment consisting of relationship and communication, QWL, appreciation, incentives and safety and security in Nepal Electricity Authority. However, the remaining 48.6 percent is still unexplained in this research. The result is supported by Akinwale and George (2020) and Raziq and Maula-Bakhsh (2022) who have also concluded that some brief prospects that business need to realize the importance of good working environment for maximizing the level of job satisfaction. But Tansel (2022) have found that the variables are negatively related to the firm size implying lower level of job satisfaction in larger firms. Hence, the firm size in return is negatively related to the degree of flexibility in the working environment.

6. Conclusions

As it is known that working environment has a positive impact on job satisfaction of employees. Similarly, bad working conditions restrict employees to portray their capabilities and attain full potential. Hence, it is imperative that the business realize the importance of good working environment. This research contributes towards the welfare of society as the results create awareness about the importance of good working environment for employee job satisfaction. The study impacts upon the future performance of businesses by taking working environment more seriously within their organizations to increase the motivation and commitment level of their employees. In this way, their work force can achieve better results. It also ensures that the employees of the organization will have the ease of working in a relaxed and free environment without burden or pressure that would cause their performance to decline.

Bibliography

Akinwale, O. E. & George, O. J. (2020). Work environment and job satisfaction among nurses in government tertiary hospitals in Nigeria. *Rajagiri Management Journal*, 14(1), 71-92.

- Alderfers, C. (1969). ERG Theory of Motivation. *Peakon Post*, 7 (5), 19-28.
- Brill, M., Weidemann, S. & BOSTI Associates. (2001). *Disproving Widespread Myths about Workplace Design*. New York: Kimball International.
- Carnevale, D.G., (1992). Physical Settings of Work. *Public Productivity and Management Review*, 4(3), 1-6.
- Chandrasekar, K. (2011). Workplace Environment and Its Impact on Organizational Performance in Public Sector Organizational. *International Journal of Enterprise Computing and Business Systems*. <http://www.ijecbs.com/january2011/N4Jan2011.pdf>
- Dorgan, C.E. (1994). Productivity Link to Indoor Environment. *Proceedings of Health Buildings*, 1(1), 3-17.
- Finnegan, M. C., & Solomon, L. Z. (1981). Work Attitudes in Windowed vs Windowless Environments. *The Journal of Social Psychology*, 115(2), 291-292.
- Herzberg, F., Mausne, B., & Snyderman, B. (1959). *The Motivation to Work*. Washington D.C.: John Wiley.
- Kinzl, J. F., Knotzer, H., Traweger, C., Lederer, W., Heidegger, T., & Benzer, A. (2005). Influence of Working Conditions on Job Satisfaction in Anesthetists. *British Journal of Anesthesia*, 94(2), 211-215.
- Leather, P., Pygras, M., Beale, D., & Lawrence, C. (1998). Windows in the Workplace: Sunlight, View and Occupational Stress. *Environment and Behavior*, 1(2), 12-19.
- Newsham, G., JayBrand, C. D., Veitch, J., Aries, M., & Charles, K. (2009). Linking Indoor Environment Conditions to Job Satisfaction. *Building Research & Information*, 37(2), 129-147.
- Raziq, A. and Maula-Bakhsh, R. (2022). The Impact of Working Environment on Job Satisfaction. *Procedia Economics and Finance*, 23(5), 717 – 725
- Robbins, S.P. (1998). *Organizational behavior: concepts, controversies and applications*. New Delhi: Prentice Hall.
- Rollinson, D., Broadfield, A., & Edwards, D. J. (1998). *Organizational Behavior and Analysis, An Integrated Approach*. New Delhi: Pearson Education, Prentice Hall.
- Tansel, A. (2022). *Job Satisfaction, Structure of Working Environment and Firm Size*. Germany: Middle East Technical University, IZA and ERF
- Veitch, J. A., Geerts, J., Charles, K. E., Newsham, G. R., & Marquardt, C. J. G. (2005). *Satisfaction with Lighting in Open-plan Offices: COPE Field Findings*, in Proceedings of Lux Europa 2005, Berlin, Germany.